The Official Texas

HURRICANE Guide

weather.gov/lakecharles

Southeast Texas Edition

MAKE YOUR PLAN. BE READY!

Jeff Gerber
Meteorologist

Patrick Vaughn
Chief Meteorologist

David Wolter
Meteorologist

12 NEWS FIRST ALERT STORM TEAM

info@coastalguardiansoutreach.org |

TEXAS DEPARTMENT OF PUBLIC SAFETY
5805 N LAMAR BLVD • BOX 4087 • AUSTIN, TEXAS 78773-0001
512/424-2000
www.dps.texas.gov

STEVEN C. McCRAW
DIRECTOR
DAVID G. BAKER
ROBERT J. BODISCH, SR.
DEPUTY DIRECTORS

COMMISSION
A. CYNTHIA LEON, CHAIR
MANNY FLORES
FAITH JOHNSON
STEVEN P. MACH
RANDY WATSON

Dear Colleagues:

Hurricanes are deadly and destructive threats to communities along the Texas coastline. Along with high winds, tropical systems can produce immense storm surge, violent tornados, and dangerous flooding.

In order to help citizens prepare, the National Weather Service has once again collaborated with local nonprofit organizations and the Texas Department of Public Safety's Division of Emergency Management to bring you the Official Texas Hurricane Guide. It is especially crucial for coastal residents to plan and prepare for each type of hurricane hazard to prevent and reduce the loss of life and property and improve community resilience.

This guide is an up-to-date, easy-to-use resource that will help you and your family better understand what to do before, during and after a storm. It will also assist your family with the preparation of a family emergency plan, checklists and a disaster supply kit. Families should review emergency plans and checklists on a regular basis. You can increase situational awareness by monitoring statements issued by the National Hurricane Center, watches and warnings issued by National Weather Service offices in Texas and broadcasts from NOAA weather radio and local media.

The emergency management community and its partners are committed to keeping Texans safe when tropical systems threaten our coastal areas. You can be a proactive and resilient household within your community by reading this guide and preparing your family in advance. For additional information about building and strengthening community resilience, you can visit Weather-Ready Nation at www.nws.noaa.gov/com/weatherreadynation.

I thank you for your continued dedication to year-round personal preparedness and for your preparations this hurricane season.

Be informed. Be prepared. Be involved.

Respectfully,

W. Nim Kidd, CEM®, TEM®
Chief
Texas Division of Emergency Management
Assistant Director
Texas Homeland Security
Texas Department of Public Safety
@chiefkidd on Twitter

EQUAL OPPORTUNITY EMPLOYER
COURTESY • SERVICE • PROTECTION

Above: High resolution satellite image of Hurricane Ike over the northwest Gulf of Mexico. Image--NASA

Hurricanes form over warm ocean waters, like those found in the Gulf of Mexico. The hurricane season starts June 1 and ends November 30. The peak threat for the Texas coast exists from August through September. However, hurricanes can and have struck the Texas coast during every month of the hurricane season.

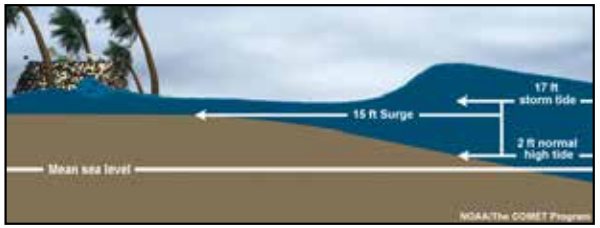
Above: Historical perspective of hurricane landfalls in Texas since 1851.

Since 1851, 63 hurricanes have struck the Texas coast. That is one every three years on average.

Storm Surge

Storm Surge Defined

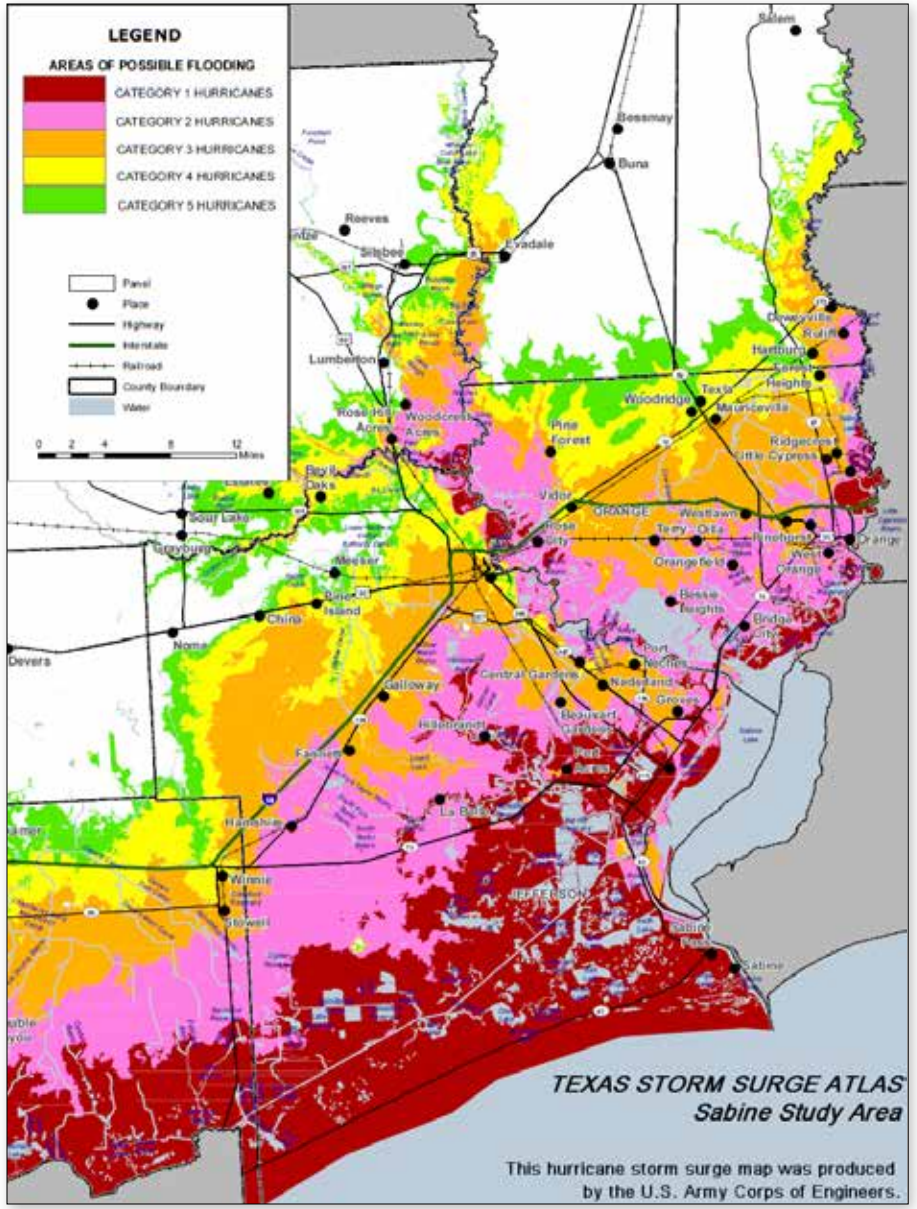
Storm surge is an abnormal rise of water generated by a storm, over and above the predicted astronomical tides. This rise in water level can cause extreme flooding in coastal areas resulting in storm tides reaching up to 20 feet or more in some cases. Along the Texas coast, these flood waters can penetrate far inland depending on the elevation of the land. If the storm tide is greater than the land elevation (even if well inland) then storm surge flooding will be possible.

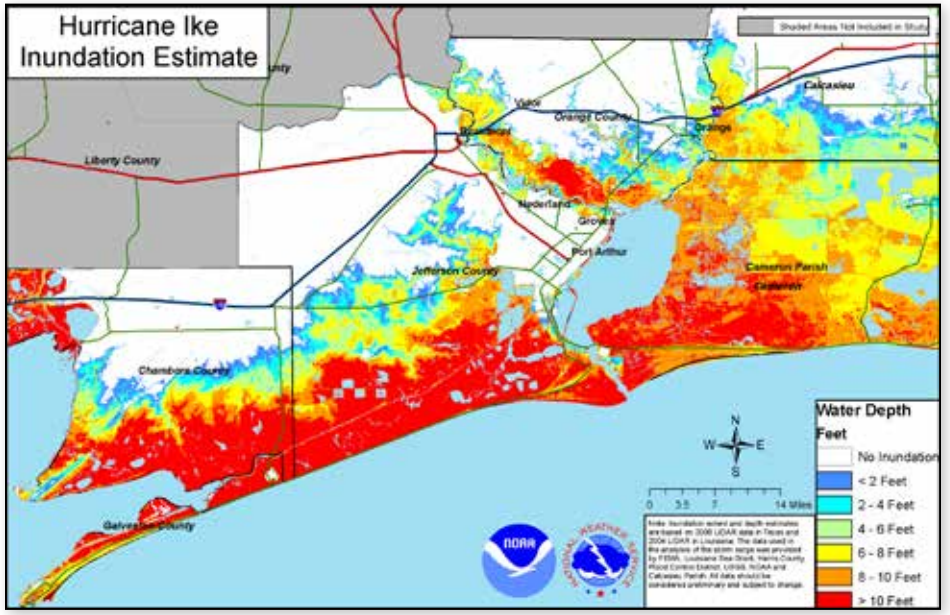


Storm Surge Can Be Deadly! Here are 6 Tips to be Ready

1. Storm surge flooding is often the greatest threat to life and property from a hurricane. It poses a significant threat for drowning. A mere six inches of fast-moving flood water can knock over an adult. It takes only two feet of rushing water to carry away most vehicles.
2. Storm surge can cause water levels to rise quickly and flood large areas in just minutes, and you could be left with no time to take action if you haven't already evacuated as instructed.
3. Storm surge is not dependent on the Saffir-Simpson Hurricane Wind Scale. Hurricane categories are based only on winds and do not account for storm surge. Any wind category can all cause life-threatening storm surge.
4. Many Gulf Coast areas are vulnerable to storm surge including areas many miles inland from the coastline depending on elevation of the coastal plain. Find out today if you live in an evacuation zone (see pages 5 in this guide).
5. Storm surge can occur before, during and after the center of the storm passes through an area, and can sometimes cutoff evacuation routes. The water can also rise well in advance of the coming storm, in some cases 36 hours or greater. When an evacuation is ordered, do not wait until the last minute to leave.
6. During the peak of a storm surge event, it is unlikely that emergency responders will be able to reach you if you are in danger.

For more information about storm surge, please visit the new NHC Storm Surge Video: https://www.youtube.com/watch?v=bBa9bVYKLP0





Hurricane Ike will long be remembered as one of the most devastating storm surge hurricanes to affect the Upper Texas Coast within the last 150 years of records. Over the warm waters of the Gulf of Mexico, Ike grew in size and intensified to a category two hurricane with maximum winds of 100 mph. The hurricane crossed the central and northwest Gulf of Mexico as it tracked towards the Upper Texas coast. Although Ike's intensity remained in the category 2 range, the cyclone continued to grow and became a very large and dangerous hurricane. Aircraft Reconnaissance measured Ike's tropical storm wind swath to be approximately 450 miles wide, with a hurricane force wind swath of 180 miles. Hours before landfall, Ike's structure began getting better organized with an eye evident. Ike made landfall on Galveston Island at 2:00 AM CDT September 13th as a strong category 2 based on 110 mph sustained winds and a central pressure of 950 mb.

The combination of Ike's large wind swath, and the fact that this wind swath piled water over the shallowest portion of the Gulf, lead to much higher than normal storm surge flooding along the Upper Texas Coast. Storm surge levels reached 18-19 feet near and southeast of High Island and along the coast of southwest Jefferson County. A 14-15 foot storm surge occurs at Sabine Pass resulting in the highest water level ever record at that location. Any structure that was not elevated was destroyed. Even homes that were elevated received water damage due to high waves on top of the storm surge.

Storm Surge from Ike

The storm surge did not top the seawall around Port Arthur which was 14.5 to 17 feet high. However, wave action on top of the storm surge did push some water over the seawall . Storm surge backed up the Neches River near Beaumont and flooded homes north of I-10 near the river. Many underpasses were flooded across Beaumont resulting in standing water over 10 feet deep in places. A storm surge as high as 10 to 12 feet reached Bridge City and downtown Orange, resulting in water as deep as 9 feet on the roads on the east side of town.

In total, at least 4000 homes in the Hamshire, Fannett, Sabine Pass, and Northeast Beaumont were flooded. Over 5000 homes from Bridge City to Rose City had water damage. Over 3000 homes in the city of Orange and surrounding areas had water enter them. Many water rescues occurred in Bridge City, West Orange, and downtown Orange.

Inland Flooding

There are numerous examples of significant flooding caused by land-falling tropical cyclones in Texas. Storms with a slow forward motion are the most dangerous as heavy rains persist for a longer period of time.

Five Practical Ways to Protect Yourself and Others From the Dangers of Inland Flooding

Protect Your Personal Documents and Special Items

- Store valuables in plastic tubs with locking tops
- In case of evacuation, you should be able to secure and move all your valuables within 15 minutes

Buy Flood Insurance: A Plan for Replaceable Items

- The National Flood Insurance Program (NFIP) is available from an insurance agent or the NFIP
- For more information see www.floodsmart.gov

Flood Proof Your Home - Take Steps to Minimize Flood Damage

- Shut off the main circuit breaker to prevent short circuiting and eliminate the threat of electrocution
- Raise outside air conditioning units onto platforms above ground level
- Store rarely used or expensive items in the attic or on high shelves

Develop a Family Flood Plan

- Develop a plan of action to keep from panicking during an emergency
- Have an evacuation route and alternatives planned in the event you are asked to evacuate
- Communicate your plans with friends or family outside of your home area
- Battery powered radios or televisions can be used in the event of a power outage

Never Drive on Flooded Roads

- Driving into flooded roadways puts your life and the lives of others at risk
- Unless told to evacuate, you are probably safest staying at your current location
- If you encounter flood waters when driving, Turn Around, Don't Drown!

Tornadoes and Destructive Winds

Tropical cyclones also produce tornadoes. These tornadoes most often occur in thunderstorms embedded in rain bands well away from the center of the hurricane; however, they can also occur near the eyewall. Tornadoes produced by tropical cyclones are relatively weak and short-lived, but still pose a threat.

Hurricane force winds of 74 mph or more can destroy buildings, mobile homes, trees and power poles. Debris such as signs, roofing material, siding, and small items left outside become flying missiles in a hurricane. The strongest winds occur in a region of the hurricane called the eyewall. Wind gusts in the right side of the eyewall are the most destructive. Hurricane force winds can be felt as far as 150 miles from the coast.

Above: Wind damage to a billboard from Hurricane Lili in October 2002.

MOBILE HOME RESIDENTS MUST EVACUATE!

- No mobile home or manufactured home - no matter how new it is - can provide safe shelter from hurricane force winds.
- Straps or other tie-downs will not protect a mobile home from the high winds associated with a hurricane.
- Mobile home residents must evacuate when told to do so by local authorities.

Saffir Simpson Hurricane Wind Scale

- Category 1 - Winds 74 to 95 mph
- Category 2 - Winds 96 to 110 mph
- Category 3 - Winds 111 to 129 mph
- Category 4 - Winds 130 to 156 mph
- Category 5 - Winds 157 mph or higher

Home Preparation

Elevation Matters

- Know the elevation of your home! Are you in a flood and/or evacuation zone?

Mobile Homes

- Check tie-downs for rust or breakage.
- Residents of mobile homes must evacuate when told to do so!!

Landscaping

- Trim trees, shrubbery and dead limbs, especially ones close to your home.
- Repair or replace broken or damaged fences.

Roofing

- Inspect the roof for loose tiles, shingles or debris. Consider replacing old or damaged shingles with new ones rated for hurricane force winds.
- Clear loose and clogged rain gutters and downspouts.

Doors

- Reinforce garage doors and tracks or replace with a hurricane tested door.
- Reinforce double entry doors with heavy duty foot and head bolts.
- Use a security dead bolt with a one inch minimum bolt length.

Windows

- If possible, install tested/manufactured hurricane shutters.
- Inspect existing shutters to ensure they are in good working order.
- Alternative: Use 5/8" or greater exterior grade plywood secured by 2 1/2" screws and/or special clips. Obtain wood and fasteners, cut wood to size, pre-drill holes and place anchors on homes.

Business and Employee Preparation

- Identify and protect vital records. Backup and store key files off site.
- Protect electronic equipment from possible water damage.
- Have extra cash and blank checks in case extra money is needed after the storm.
- Develop a 24-hour emergency contact with phone numbers of key employees.
- Set up telephone numbers for employees to check in and receive company information.
- Establish a temporary location for business operations in case your facility is damaged.
- Give employees enough time to secure their homes and families.
- Consider paying employees before they leave to prepare their homes.

Marine Preparations

- Check with the manufacturer for proper ways to secure your boat during a storm.
- Purchase necessary hurricane materials such as additional mooring lines, crew anchors, fenders, fender boards, chafing gear, and anchors.
- Safe storm moorings should consist of good condition ropes of sufficient diameter and length, with at least three or four substantial anchor points.
- Do not moor parallel to bank. Receding tides often capsize boats in this type of anchorage.

Preparing for Your Pet's Safety

Your pet should be part of your overall hurricane preparation plans. Below are a few important things to help you prepare:

- Make sure your pet's vaccinations are current and have proof they are current. DO NOT assume that a public shelter or hotel will accept your pet.
- Be sure to have a current photo of your pet.
- Each animal should have a properly sized pet carrier. The carrier should be large enough for the animal to stand up and turn around.
- Pack enough food and bottled water for the duration of your evacuation. DO NOT let your pet eat food or drink water from outside that may have become contaminated.
- Be sure to pack all medications your pet may need along with a muzzle, collar, leash, paper towels, and trash bags.
- Make sure your pet has a proper ID collar.

Do you or anyone you know need some form of assistance during times of an emergency/disaster event? The state of Texas offers Texans the option to register with the STEAR program, a FREE registry that provides local emergency planners and responders with additional information on the needs in their community.

(Texas communities use the registry information in different ways. Registering yourself in the STEAR registry DOES NOT guarantee that you will receive a specific service during an emergency. Available services will vary by community. For more information on how your community will use information in the STEAR registry, contact your local emergency management office.)

Who Should Register?

- People with Disabilities
- People with access and functional needs such as:
  - People who have limited mobility
  - People who have communication barriers
  - People who require additional medical assistance during an emergency event
  - People who require transportation assistance
  - People who require personal care assistance

How to Register

- https://STEAR.dps.texas.gov
- Dial 2-1-1 or use your video phone relay option of choice to contact 211
- Printed or electronic forms (Contact your local government)

Required Information to Register

- Name
- Address
- Phone Number
- Primary Language

Registration is **VOLUNTARY**.

Additional questions asked to capture vital information for local emergency planners and responders

- Emergency Contact Information
- Caregiver Information
- Pets
- Transportation assistance for home evacuation
- Communication Barriers
- Disability, Functional or Medical Needs

All of the information you provide will be kept **COMPLETELY CONFIDENTIAL.**

Insurance Tips

Before the Storm

- New and existing policies will not be written or modified when a storm nears the Gulf of Mexico.
- Make sure you fully understand what perils are covered and excluded in your policy.
- Make sure your coverage is adequate to replace your home and contents in today's dollar.
- Determine whether your policy covers additional living expenses for a temporary residence if you are unable to live in your home because of damage from a disaster.
- Before hurricane season, prepare detailed written and/or photographic inventory of your home's contents and store it in a safe place with your policy.
- If your insurance company does not cover flood or windstorm perils, ask about coverage through the Texas Windstorm Insurance Association or the National Flood Insurance Program.

After the Storm

- Give prompt written notice to your insurance company.
- Photograph or videotape damaged structures and all damaged property. Make a list of damaged or lost items.
- DO NOT throw out damaged property before your adjuster has inspected the debris unless it is a health hazard or impedes local cleanup.
- Protect your property from further damage.
- Keep an accurate record of temporary repair and living expenses if a loss of use is suffered.

Important Online Insurance Information

- National Flood Insurance Program
  www.floodsmart.gov
- Texas Windstorm Insurance Association
  www.twia.org Consumer help line
  800-788-8247
- Texas Department of Insurance
  www.tdi.texas.gov
  Consumer help line 800-252-3439

Contact Info and Supplies

Your local Texas Chapter of the American Red Cross recommends that you have the following items in your Hurricane Supply Kit. Do not forget to have a family meeting before hurricane season and review your communication information and evacuation plan. Make sure the contact information such as home, work, school, cell phone numbers, and your "Out of Town" contact person's information is current.

American Red Cross

Emergency Contact Information

Out of Town Contact Address: _____

Out of Town Contact Phone Number: _____

Work Telephone Number: _____

Cell Number/Spouse Cell Number: _____

Children Cell Number: _____

School Telephone Number: _____

Doctor Telephone Number: _____

Bank/Credit Card Telephone Number: _____

Insurance Company Information: _____

24 hour number to call for assistance

1-800-RED CROSS (1-800-733-2767)

Hurricane Supply Kit

Your chapter of the American Red Cross recommends that you have the following items in your Hurricane Supply Kit.

- At least a 7-day supply of non-perishable food and water. One gallon of water per person per day is recommended
- Battery powered portable television or radio with extra batteries
- Flashlight with extra batteries
- First Aid kit and manual
- Sanitation and hygiene items such as instant hand sanitizing gel, moist towelettes, toilet paper, and feminine hygiene products
- Whistle
- Kitchen accessories, cooking utensils, and manual can opener
- Cash
- Extra clothing, blankets, and sleeping bags
- Matches in a waterproof container
- Photocopies of identification, insurance, prescriptions, household inventory, credit cards, and your latest utility bill
- CD or photocopies of important documents such as birth/marriage certificates and titles
- Prescription medications, eyeglasses, contact lens solution, and hearing aid batteries
- Formula, baby food, diapers, and pacifiers
- Pet carriers, leashes, shot records, and food for each animal evacuating with you
- A good map showing county roads and highways
- Tire repair kit, booster cables, pump, and flares
- White distress flag
- Toys and games for children
- List of family phone numbers and addresses outside the area

Hurricane Names

Hurricane Names

2015

- ❑ Ana
- ❑ Bill
- ❑ Claudette
- ❑ Danny
- ❑ Erika
- ❑ Fred
- ❑ Grace
- ❑ Henri
- ❑ Ida
- ❑ Joaquin
- ❑ Kate
- ❑ Larry
- ❑ Mindy
- ❑ Nicholas
- ❑ Odette
- ❑ Peter
- ❑ Rose
- ❑ Sam
- ❑ Teresa
- ❑ Victor
- ❑ Wanda

2016

- ❑ Alex
- ❑ Bonnie
- ❑ Colin
- ❑ Danielle
- ❑ Earl
- ❑ Fiona
- ❑ Gaston
- ❑ Hermine
- ❑ Ian
- ❑ Julia
- ❑ Karl
- ❑ Lisa
- ❑ Matthew
- ❑ Nicole
- ❑ Otto
- ❑ Paula
- ❑ Richard
- ❑ Shary
- ❑ Tobias
- ❑ Virginie
- ❑ Walter

2017

- ❑ Arlene
- ❑ Bret
- ❑ Cindy
- ❑ Don
- ❑ Emily
- ❑ Franklin
- ❑ Gert
- ❑ Harvey
- ❑ Irma
- ❑ Jose
- ❑ Katia
- ❑ Lee
- ❑ Maria
- ❑ Nate
- ❑ Ophelia
- ❑ Philippe
- ❑ Rina
- ❑ Sean
- ❑ Tammy
- ❑ Vince
- ❑ Whitney

Hurricane Tracking Map

This chart is marked with vertical(longitude) and horizontal (latidtude) lines, each representing 1 degree. A storm's position is given in these degress. Find the given longitudinal number at the bottom of the chart. Follow it up where it intersects with the given latitudinal line. Place a mark on the intersection point (this is the hurricane's current position).

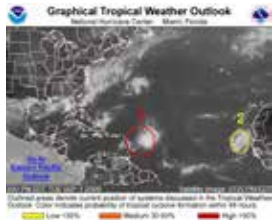
Stay Connected: 12 HD NEWS

Latest Weather Information

- National Weather Service
  weather.gov/lakecharles
  24 Hour Phone Recording:
  377-477-5285
- National Hurricane Center
  www.hurricanes.gov

@NWSLakeCharles

The National Hurricane Center (NHC) in Miami, FL is the official source for tropical cyclone advisories and forecasts and is responsible for issuing tropical cyclone watches and warnings for the United States.



Tropical Cyclone Impact Graphics

Graphical Tropical Weather Outlook

- NHC product provides an overview of all tropical cyclone activity, indicates areas of interest that have potential for tropical cyclone development.

NHC Forecast Advisory

- Most recent position for a storm along with all coastline watches and warnings. Includes a 3 or 5 day track with error cone.
- Error cone represents a 5 year average error. Storms only stay within the error cone 67% of the time.
- DO NOT focus too closely on the exact track forecast - the little black line.

Potential Storm Surge Flooding.

- If a tropical storm or hurricane is threatening your community, go to www.hurricanes.gov to see a map like this, which will show potential storm surge flooding for your area.
- New Storm Surge Watch/Warning graphic will highlight threatened areas.

Hurricane Threats and Impacts

- Issued by local NWS offices to summarize potential impacts expected from the tropical cyclone.
- Click on each colored area to pop up text that describes potential impact.
- weather.gov/tcig

Actions to Take When a Storm is in the Gulf

- Listen frequently to radio, TV, or NOAA weather radio for bulletins and forecasts of the storm's progress.
- Double check items in your emergency supply kit.
- Fuel and service your vehicles.
- Inspect and secure mobile home tie-downs.
- Board up windows (if shutters do not exist) in case storm moves quickly and you have to leave! **TAPE PROVIDES NO PROTECTION!**
- Store lawn furniture and other loose, light weight objects, such as garbage cans and garden tools.
- Garage or store vehicles that are not being used.
- Follow instructions issued by local officials. **EVACUATE IMMEDIATELY IF ORDERED TO DO SO!**

Final Actions to Take if Leaving

- Turn off propane tanks.
- Unplug small appliances.
- Empty refrigerator and freezer.
- Turn off utilities if ordered to do so.
- Lock home securely.
- Take pets with you.

Final Actions to Take if Staying

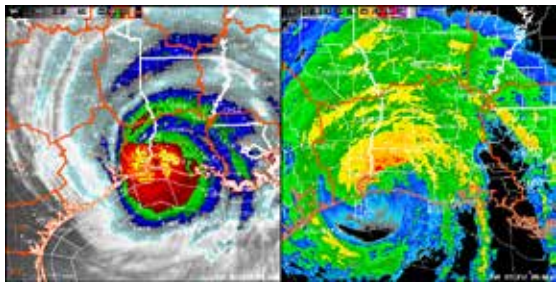
- Close storm shutters.
- Notify family members of your evacuation plans.
- Lower water level in swimming pool by one foot.
- Turn refrigerator or freezer to coldest setting and open only if necessary. (25 pounds of dry ice will keep a 10-cubic foot freezer below freezing for 3-4 days.)
- Follow instructions from emergency managers and be prepared to turn off utilities if ordered to do so.
- Board up remaining doors, brace garage door, and remain inside. Stay away from boarded up windows.
- Take refuge in a predetermined safe room, such as an interior closet, bathroom, or hallway.
- **DO NOT EXPECT EMERGENCY RESPONDERS TO BE OF ANY ASSISTANCE DURING A LANDFALLING HURRICANE!**

Hurricane Rita formed on September 18, 2005 west of the southeastern Bahamas, where Rita moved over the following day. Heading westward, Rita attained hurricane strength on September 20th while passing between the Florida Keys and Cuba. After entering the Gulf of Mexico, Rita rapidly intensified over the very warm waters of the loop current and within an environment of very weak vertical wind shear. Rita reached a peak intensity of category 5 with sustained winds of 155 knots (180 mph) and a minimum pressure of 895 mb (26.43 inches of mercury) at 10 PM CDT September 21st. This low pressure makes Rita the strongest hurricane every recorded in the Gulf of Mexico, and 4th strongest in the Atlantic Basin.

By September 22nd, the inner eyewall of Rita deteriorated and the system weakened to a category 4 with sustained winds of 125 knots (145 mph) by 1 PM CDT. By early on September 23rd, a new outer eyewall had consolidated and the hurricane had grown in size, but weakened a bit further to a Category 3 with sustained winds of 110 knots (125 mph) by 1 PM CDT. Due to increasing southwesterly wind shear and slightly cooler waters, steady weakening continued for the remainder of the day.

Rita made landfall across western Cameron Parish just east of the Texas and Louisiana border around 2:40 AM CDT Saturday September 24, 2005 as a category 3 hurricane with sustained winds of 100 knots (115 mph) and a minimum pressure of 937 mb (27.67 inches of mercury). Rita was the strongest hurricane to strike Southeast Texas and Southwest Louisiana since Hurricane Audrey on June 27, 1957. Preliminary information suggests that Rita was comparable to Audrey in many ways and perhaps worse in that the effects were felt across a larger area.

Hurricane Rita caused seven direct United States fatalities, one in the WFO Lake Charles county warning area. Over a hundred indirect fatalities were associated with the evacuation and aftermath of Hurricane Rita within the United States. Six individuals in Beaumont, Texas succumbed to carbon monoxide poisoning when they used a generator inside their building. Although any loss of life is tragic, these numbers stand in stark contrast to the hundreds of lives lost due to Hurricane Audrey. Clearly, the improvements made to emergency preparedness and response to warnings has made a difference.



Above Left: GOES-12 Infrared Satellite Image; Above Right: Lake Charles WSR-88D Radar Image of Hurricane Rita at 2:31 AM September 24, 2005.

Storm surge values of 12 to 18 feet across most of Cameron parish, and 10 to 12 feet across most of Vermilion parish devastated these areas, with Holly Beach, LA completely leveled to the ground. Storm surge values of 8 to 10 feet across eastern Jefferson and Orange counties in Southeast Texas caused considerable damage to Sabine Pass and Bridge City.

Hurricane Rita

After making landfall across western Cameron parish, the eye of Rita passed over a majority of Southeast Texas from Sabine Lake to Sam Rayburn Reservoir. In fact, the eye of Rita passed over Southeast Texas Region Airport south of Beaumont, TX, producing a record lowest pressure reading of 952.3 mb (28.12 inches) at 3:09 AM CDT September 24, 2005.

Wind damage was extensive across Southwest Louisiana and Southeast Texas as well, with a large area receiving category 1-2 hurricane force winds (see estimated wind gust graphic). Exact measurements were not possible in some areas due to power outages and failures of automated weather observing sites, and coastal tide gauges being washed away by the storm surge.

Hurricane Surf & Rip Currents

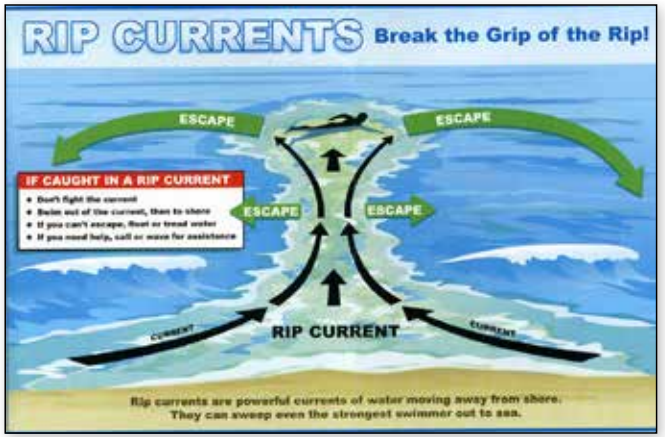
Hurricane Surf


Photo: gscottimaging.com

Along with big surf come strong rip currents. Rip currents are the leading surf hazard for all beach goers and result in over 100 drownings every year in the United States. The strength and size of rip currents are related to the size of the surf and wave period. Rip currents typically form at the low spots in the surf, at the breaks in the sandbars, and near jetties and piers.

Rip Currents

If caught in a rip current, don't panic, but swim parallel to the shore. The current is usually only about 50 feet wide and you should be able to swim out of it. At that point, you can swim back to shore. If you are still unable to reach the shore, draw attention to yourself: face the shore, wave your arms, and yell for help.



Student Information Checklist

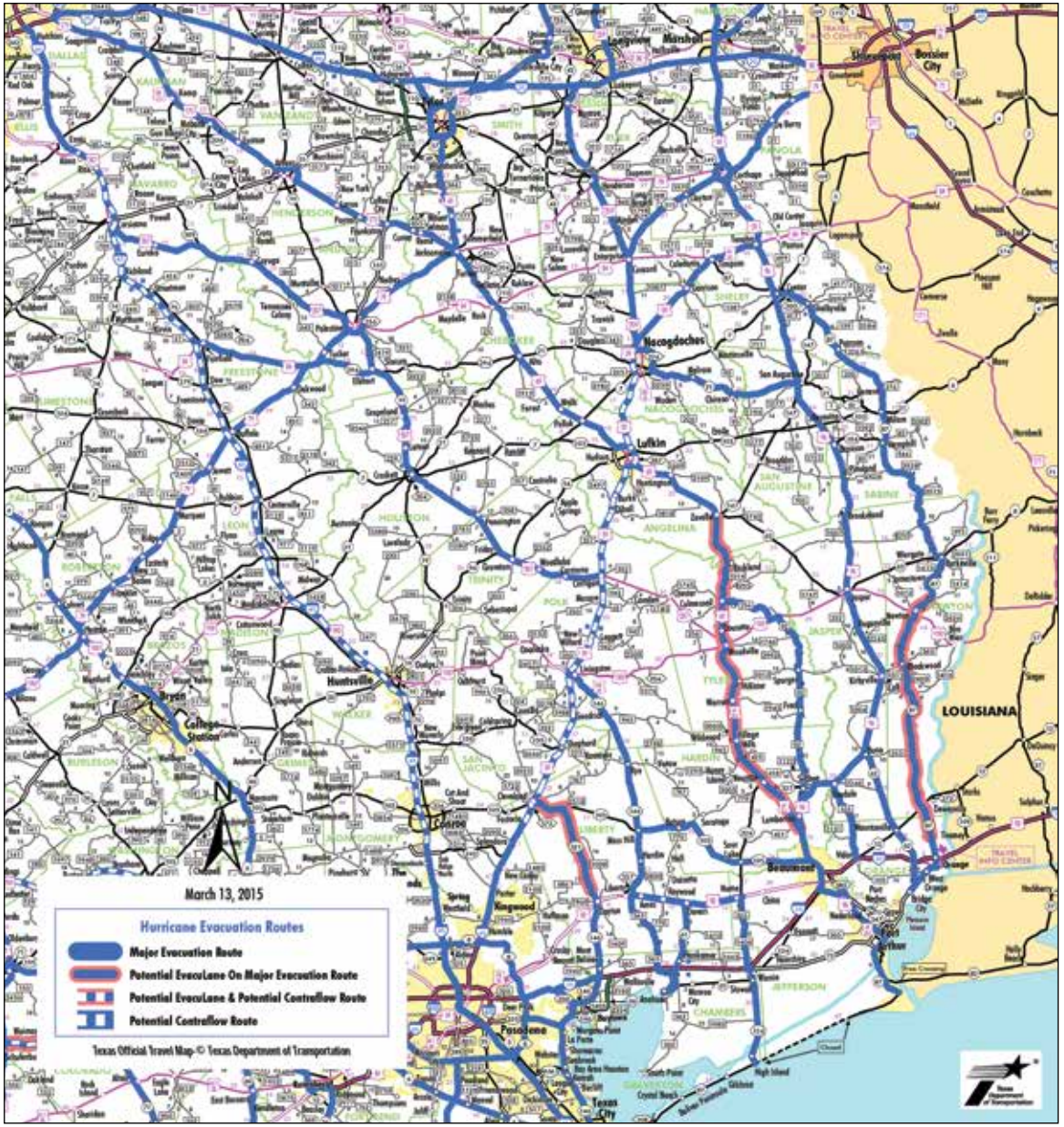
- Assure that all contact information and emergency contact information is accurate with your campus' registrar's office.
- If your campus offers an emergency management communication system, register as a user of the system.
- Plan your method of evacuation and your destination before a storm enters the gulf.
- Monitor local radio and TV stations for updates.
- Contact your campus Student Affairs Office if you need assistance with evacuation.
- If you require any assistance due to a disability-related accommodation, please contact your campus Disability Services Office to make necessary arrangements.
- Communicate with your family regarding status and location
- If your campus is evacuating, you will not be allowed to remain on-campus and it is highly recommended that you leave the city. Do not go to a coastal location.
- Take your driver's license, student I.D. card, and a copy of your housing lease as well as medical insurance cards and other important documents when you evacuate.
- If you bank with a local bank or credit union whose infrastructure may be damaged by the storm, withdraw some funds as you may not have access to them once you leave the area.
- International students must take passports with US student visa inside, I-20, I-94, student I.D. and class schedule.
- If using personal transportation, take as many of your valuable or irreplaceable items as you are able.
- If driving, make sure all roads that you are driving are open and safe. You can call the Department of Transportation at 1-800-452-9292 or check on-line for conditions at www.txdot.gov
- Follow baggage limits if participating in an assisted evacuation program.
- Take a 30-day supply of medications in original pharmacy containers.
- Make a record of any valuables left behind (description, serial numbers, etc). Take pictures of all belongings.
- If you are evacuating to a shelter, make appropriate arrangements for pets. Most shelters do not accept pets.
- Do not plan to return to campus until an all-clear is given (monitor media and campus web-site).

Evacuation Routes

Evacuees need to consider the projected path of the hurricane when choosing an evacuation route and destination. When evacuating, be sure to check local weather and highway conditions before departing. When local authorities order an evacuation of your area, leave immediately!

Final Actions before Evacuating

- Follow evacuation orders provided by your local officials. Once the evacuation order has been given, LEAVE IMMEDIATELY!
- Take your Hurricane Supply Kit with you.
- Leave as early as possible to avoid heavy traffic and hazardous weather.
- Do not stay in a mobile home near the coast under any circumstance.
- Remember that large boats and travel trailers may not be allowed to cross local bridges and causeways once high winds commence.
- Prepare to stay at your evacuation destination for a week or more, as re-entry into the affected area may be restricted.



Texas Road Information

- TXDOT Highway Conditions
  1-800-452-9292 or
  www.drivetexas.org

TXDOT Office
Beaumont - 1-409-924-6521
Port Arthur - 1-409-722-6521
Orange - 1-409-883-3476
Jasper - 1-409-384-9096

- Emergency Broadcast Information
  KQXY 94.1 FM
  KLVI 560 AM
- Twitter: @TxDOTalert

Evacuation Notes

southeast texas edition

Hurricane Ike: September 12-13, 2008.

Very large category two hurricane that made landfall at Galveston Texas. Hurricane force winds were recorded over most of Southeast Texas. However, Ike will be remembered for the record storm surge values (NAVD 88) from 14 feet near Sabine Pass with 11 to 12 feet across Sabine Lake, flooding portions of Bridge City and Orange. Port Arthur was spared the storm surge thanks to its 14-17 foot seawall. However, the remaining southern half of Jefferson county was inundated, with estimated high water marks reaching 18 to just over 19 feet to the south and east of High Island. This is the worst storm surge flooding recorded across this region during the last 150+ years of record keeping.

Tropical Storm Edouard (August 5, 2008)

Was a tropical storm that made landfall at McFaddin National Wildlife Refuge in Southeast Texas. Storm surge values ranged from 3 to 5 feet across Jefferson and Orange counties and Sabine Lake.

Hurricane Humberto: September 12-13, 2007.

Very small category one hurricane that made landfall between High Island and Sea Rim State Park in Jefferson county, Texas. Due to the small size, storm surge values were 4 to 5 feet across Jefferson county, 3 to 4 feet across Sabine Lake.

Hurricane Rita: September 23-24, 2005.

Very large category three hurricane that made landfall between Johnson's Bayou and Sabine Pass, affecting the entire Louisiana and Southeast Texas coasts. Hurricane force winds were recorded from Jasper, Kountze, and High Island, Texas eastward into Louisiana. Storm surge values 8 to 10 feet (NAVD 88) across eastern Jefferson and Orange counties in Southeast Texas.

Tropical Storm Allison (June 5-10, 2001)

Was a slow moving tropical storm with heavy rainfall that will be known for flooding areas of Southeast Texas (especially Houston and Beaumont) & Louisiana, very similar to Tropical Storm Allison from June 26-30, 1989.

Tropical Storm Frances: September 9-12, 1998.

Very large tropical storm that made landfall across the Central Texas coast, but the circulation covering the entire northwestern Gulf of Mexico. Every road in Sabine Pass was under water, except Highway 87 right in front of the school. Highway 87 flooded south of Port Arthur to Sabine Pass, and north of Port Arthur to Bridge City. Many locations further inland across western Jefferson county was also under water. The extensive flooding was due to tides running between 3½ to near 5 feet for 2½ days.

Hurricane History

Hurricane Chantal: August 1, 1989, Hurricane Jerry: October 15, 1989.

Very small category one hurricanes that made landfall at High Island and Galveston respectively. Storm surge values were 4-5 feet across Jefferson County.

Hurricane Bonnie: June 26, 1986.

Very small category one hurricane that made landfall between High Island and Sea Rim State Park in Jefferson County. Storm surge values were 6-7 feet across Jefferson county

Hurricane Alicia: August 17-18, 1983.

Small Category three hurricane that made landfall across the Upper Texas coast just southwest of Galveston near Freeport. Storm surge values were just over 5 feet at Sabine Pass with higher values likely across Coastal Western Jefferson county.

Hurricane Carla: September 10-12, 1961.

Extremely large category four hurricane (circulation covered the entire Gulf of Mexico at one point) made landfall across the Central Texas coast. Due to the large size of the storm, storm surge values of 7 to 8 feet were common across coastal Jefferson and Orange Counties.

Hurricane Audrey: June 26-27, 1957.

Very large category four hurricane, with a 40 mile wide eye, made landfall from Sabine Pass to Cameron. Audrey affected the entire Louisiana and Southeast Texas coasts. Storm surge values of 8 to 10 feet were recorded across Eastern Jefferson and Orange Counties in Southeast Texas.

1915 Galveston Hurricane (August 16-17, 1915)

Was a very large category four hurricane that made landfall across western Galveston Island Texas. Due to the large size of the storm, storm surge values of 9 to 11 feet were common across coastal areas of Jefferson and Orange counties.

1900 Galveston Hurricane (September 8-9, 1900)

Was a large category four hurricane that made landfall across Galveston Island Texas, and remains the deadliest hurricane in United States history. Between 6,000 and 8,000 people in the city of Galveston had died, and estimated casualties for the entire island ranged from 10,000 to 12,000. Storm surge for Jefferson and Orange counties not available.

IF YOU EVACUATED THE AREA, WAIT FOR AN ALL CLEAR FROM THE CITY OR COUNTY BEFORE ATTEMPTING TO RETURN TO YOUR HOME. BE PREPARED TO SHOW PROOF OF RESIDENCE BY HAVING A COPY OF YOUR LATEST UTILITY BILL.

Debris Cleanup

- Cities and counties will publish a schedule for debris pick-up and removal. Debris cannot be removed from private property.
- Construction materials, vegetative debris, household hazardous waste and household appliances will need to be placed into separate piles and moved to the curbside for pick-up.

General Cleanup

- Be cautious of structural damage and downed power lines. Do not attempt to move structural supports or large pieces of debris.
- DO NOT run power generators indoors. Inhalation of carbon monoxide from the exhaust can cause death. Ensure exhaust is well ventilated.
- DO NOT use open flames indoors.
- Restrict your driving to emergency use only. Road conditions may not be safe until road debris is cleared.

Water

- Listen for instructions regarding public water supply. Use only bottled, boiled or treated water until you know that your water supply is safe.
- You can use household chlorine bleach to treat water for drinking or cleaning. Add 1/8 teaspoon of bleach per gallon of clear water or 1/4 teaspoon of bleach per gallon if water is cloudy. Allow water to stand for 30 minutes before using.

Interior Cleanup

- Disinfect and dry interior buildings and items inside. This will prevent growth of some bacteria, viruses, mold, and mildew that can cause illness.
- Clean walls, floors, and counter tops with soap and water. Disinfect them with a solution of 1 cup of bleach to 5 gallons of water.
- Wash all clothes and linens in hot water. Air dry and spray all unwashable items with disinfectant. Steam clean carpets. Throw away all items touched by water that cannot be disinfected.

Returning Home

Utility Cleanup

- Check for gas leaks. If you smell or hear gas leaking, leave immediately. DO NOT use the phone or turn on lights in your home. Call the gas company from a neighbor's phone.
- Report any visible damage of power lines to the electric company. Turn off power at main breaker if any electrical equipment or circuits have been exposed to water.
- DO NOT connect generators to your home's electrical circuits. If a generator is on line when electrical service is restored, it can become a major fire hazard. Also, line workers working to restore power will be endangered if a generator is hooked up to the home's circuits.
- It is likely that an electric company other than your own will reconnect the lines to your home; however, they cannot turn the service back on. Only your electric company can actually turn the power back on to your house.

Sewage Cleanup

- If you suspect water or sewage lines are damaged, do not use your plumbing (toilets, sinks, etc.). Contact the water company or a plumber for repairs.
- A chemical portable commode can be created by the following:
  - Use 5 gallon buckets with tight lids, lined with heavy duty plastic garbage bags.
  - Add kitty litter to the bucket as a disinfectant and deodorizer. Keep lids on firmly.
  - Keep buckets in a cool, dark place. Clean and disinfect buckets immediately.
- Your toilet can also be used by flushing until the bowl has no water. Then, line with heavy duty trash bags and disinfect with chlorine bleach after each use. Remove waste to an outside location.
- If significant sewer outages have occurred, instructions for disposal of human wastes will be announced.
- DO NOT dispose of human waste through your regular trash!

NATIONAL WEATHER SERVICE LAKE CHARLES
- 337-477-5285 - www.weather.gov/lakecharles

NATIONAL FLOOD INSURANCE PROGRAM
- 888-379-9531 - www.floodsmart.gov

NATIONAL HURRICANE CENTER
- www.nhc.noaa.gov

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
- 800-621-3362 - www.fema.gov

Community Resource Information:

Do Not Call 911 for Non-Emergencies!

TEXAS GOVERNOR'S DIVISION OF EMERGENCY MANAGEMENT
- 512-424-2000 - www.txdps.state.tx.us/dem/index.htm

TEXAS ROAD CONDITIONS
- 800-452-9292 - http://apps.dot.state.tx.us/travel/road_conditions2.htm

AMERICAN RED CROSS - BEAUMONT CHAPTER
- 409-832-1644 - www.redcross.org/tx/beaumont

AMERICAN RED CROSS - ORANGE CHAPTER
- 409-883-2322 - www.redcross.org/tx/orange

Texas County Contacts:

JEFFERSON
- 409-835-8757 - www.co.jefferson.tx.us/em.htm

ORANGE
- 409-882-7895 - www.co.orange.tx.us/

JASPER
- 409-384-6226 - www.co.jasper.tx.us/

NEWTON
- 409-379-5691 www.co.newton.tx.us/

TYLER
- 409-283-5411 www.co.tyler.tx.us/

HARDIN
- 409-246-5119 www.co.hardin.tx.us/

Hurricane Hunters

When a hurricane threatens the United States, or islands around the Caribbean Sea, the 53rd Weather Reconnaissance Squadron, known as the Hurricane Hunters of the Air Force Reserve, begin flying into the storm. These brave men and women fly 14 hour missions, slicing through the eyewall of the hurricane, buffeted by howling winds, blinding rain, hail, and violent updrafts and downdrafts, to collect data critical to hurricane forecasting.

The Hurricane Hunters are based out of Keesler Air Force Base in Biloxi, Mississippi and fly in an aircraft called the WC-130J, which is the newest generation of the C-130 Hercules flown by the U.S. Military. These planes are capable of operating in very rough conditions, including hurricanes. Safety is their primary concern. Although there is always a risk associated with aviation, the hurricane hunters pride themselves on the fact that they have flown over 100,000 hours without a mishap.

Crew onboard the aircraft deploy special instruments called GPS (Global Positioning System) drop wind sondes in the eye of the storm. These instruments fall to the ocean surface and provide a detailed look at the structure of the storm by measuring the pressure, humidity, temperature, and wind speed and direction. The data collected is relayed to specialists at the National Hurricane Center in real time, and is then ingested into computer models to help forecasters make accurate predictions on the storms track and intensity.

NOAA also has a series of aircraft that fly both research and operational missions into hurricanes, including the Lockheed WP-3D Orion, Gulfstream IV-SP, and several smaller propeller aircraft. These planes are equipped with more advanced instruments that include onboard dopper radar.

The U.S. Air Force has been flying missions into Hurricanes since WWII. NOAA pilots have flown into hurricanes since 1975. Information gathered from the Hurricane Hunters helps to improve forecasts by as much as 30% and directly contributes to the safety of Americans living along the vulnerable Atlantic and Gulf coasts.

We're here for your community before and after the storm.

Walmart
Save money. Live better.

TWO NEW APPS TO KEEP YOU SAFE

THE 12NEWS APP
LOCAL WEATHER AND
NEWS UPDATES

THE WATCH 12NEWS APP
LIVE STREAM TO YOUR
MOBILE DEVICE

abc NBC

12NEWS
ANYTIME - ANYWHERE

SETRPC
SOUTH EAST TEXAS REGIONAL PLANNING COMMISSION

For up-to-date emergency information, go to setinfo.org For information and referral to local resources, dial 211. If you have no means to evacuate, dial 211 to register for a ride out.

2-1-1 TEXAS
Connecting People and Services
2210 Eastex Freeway Beaumont, TX 77703

Howell Furniture
Real Style. Better Quality. More Value

6095 Folsom Rd BEAUMONT
2018 Hwy 365 NEDERLAND
2000 E. College St. LAKE CHARLES

www.howellfurniture.com